

Developing an Outcome Based Education Based Education Rubric and Identifying Its Scoring Value for Courses in Vocational College

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Abstract. Politeknik Negeri Media Kreatif is a vocational college which is outcome oriented especially in the field of creative industry. The outcome is the result of teaching and learning activities in the form of products, projects, problem solving, or ideas resulting from case studies. In practice, the curriculum used in each course has implemented outcome-based education (OBE). However, there is no standard document or assessment rubric that states the concrete implementation of OBE. Therefore, this research was carried out with the aim of developing an OBE-based course assessment rubric and student activity sheet as complementary to the Rencana Pembelajaran Semester (RPS). The short-term target to be achieved is the implementation of OBE so that each course is able to provide proof of achievement of passed indicators. The long-term targets are to achieve higher education's Indikator Kerja Utama, namely collaborative and participatory teaching and learning activities, as well as accreditation of study programs to national and international standards. This research was carried out using educational research and development methods.

Keywords: OBE, assessment rubric, student activity sheet, vocational college

1 Introduction

Politeknik Negeri Media Kreatif or commonly called Polimedia is a vocational college which has its specialty in the field of creative industry. Each Study Program carries out teaching and learning activities that produce specific outputs. Learning activities and their outputs certainly have different characteristics for different study programs. Lecturers at Polimedia have been producing output from their teachings in order to achieve Learning Outcomes in the form of products, projects, problem solving, or ideas resulting from case studies. In practice, the curriculum used in each course has implemented outcome-based education (OBE). However, there is no standardized document or active assessment rubric that states the concrete implementation of OBE.

Starting from these needs analysis, the initiative emerged to develop an assessment rubric in the form of student activity sheets and assessment instruments as a complement to the Semester Learning Plan. This assessment rubric can be used by lecturers and students to focus on learning outcomes from each course material or assignment. This initiative also contributes to building the Higher Education curriculum in order to support *Merdeka Belajar Kampus Merdeka* [1]. Apart from that, the implementation of the OBE approach will help Study Programs for the international accreditation process which used OBE as its standard. This

target is certainly in line with Polimedia's vision as a leading and superior Vocational Higher Education institution in the field of creative industries by 2030 in Southeast Asia.

Research on the OBE approach was done by a research team from the Bandung who studied the application of OBE to identify factors that influence student success in course learning achievements [2]. Based on this research, it was concluded that the role of lecturers in building a teaching atmosphere that focuses on outcomes is very important. Apart from that, a series of OBE instruments are needed to support increasing learning outcomes with each performance.

Another researcher from Surakarta proposed an assessment rubric using the OBE method [3]. In this research, a trial of the proposed rubric was executed for certain courses. Then, it was concluded that the results of creating an assessment rubric would provide more detailed value information regarding the achievement of Course Learning Outcomes (CPMK) and Graduate Learning Outcomes (CPL) in the form of graphs and percentages.

Its development needs to go through various stages that refer to academic legal references and foundations. The assumption that will be proven is that the application of the OBE approach to course teaching and learning activities makes it easier for lecturers to provide actual assessments, and provides opportunities for students to prove their abilities.

2 Literature Review

This section will describe the concepts or theories used as the basis for this research. The concepts that will be explained are outcome-based education (OBE) and OBE-based Assessment Rubrics

2.1 Outcome-Based Education

Outcome-Based Education (OBE) is a performance-based approach system with the aim of developing a curriculum that focuses on students [4]. OBE is future-oriented and requires a sustainable system and various rubrics that are used as evidence of the output of each activity done by students. In implementing OBE the assessment process is important. Assessment based on learning outcomes leads to its achievement and provides experience to students. The main purpose of implementing OBE, especially in the assessment process, is to authenticate learning outcomes [4]. Thus, the output of implementing OBE can also be used by Study Programs to improve performance in the accreditation process, both national and international.

Apart from that, the application of OBE is to evaluate student skills and competencies as a whole. In the explanation section of the Assessment Rubric, a holistic approach will be explained which is able to explain student competencies in the form of accumulated knowledge, values and abilities [4].

Based on the MBKM Curriculum Preparation Guidebook, the OBE approach is applied simply with three interrelated stages, namely outcome-based curriculum (OBC), outcome-based learning and teaching (OBLT), and outcome-based assessment and evaluation (OBAE) [1].

2.2 OBE-Based Assessment Rubric

Basically, in Vocational Universities, OBE approach has been implemented and applies what has been mentioned regarding OBE. Because, Vocational Schools need to apply more practical portions compared to theoretical teaching. However, universities need to complete

learning documents with assessment rubrics, one of which is a student activity sheet. Apart from that, the application of OBE is to evaluate students' skills and competencies in detail and comprehensively. There are at least three types of rubrics to use as a reference for developing them, namely:

- holistic rubric that is able to explain student competencies in the form of accumulated knowledge, values and abilities [4]
- analytical rubric that presents levels of assessment criteria; and
- perception scale rubric where the assessment levels are not described [1].

Assessment rubrics provide a number of benefits, including being an objective and consistent assessment guide with clear criteria; provide information on assessment weights at each student's ability level; motivating students to play a more active role in learning; students use rubrics as a benchmark for their abilities; students receive accurate feedback; as an instrument for reflection on the learning process; and process guidelines and assessment of student learning outcomes [1].

2.3 Student Activity Sheet

Student Activity Sheets are one of the tools in learning documents. Its design is intended to provide guidance to students in following learning steps [5]. Student Activity Sheets often support student activities in the problem-solving process. Its content is usually accompanied by course descriptions, materials, summaries and instructions for implementing learning activities [5].

Its usage varies depending on the teaching materials provided in a particular course. Every lecturer needs to adapt theirs according to certain teaching methods to provide maximum benefits. The benefits of using Student Activity Sheets are as follows:

- students are becoming more active in learning;
- students are helped in developing concepts;
- students are trained in understanding learning based on work steps;
- lecturers are assisted in preparing teaching materials;
- lecturers and students have learning guidelines;
- students get accurate feedback; and
- students are able to add information related to the concepts of the material being studied [6].

3 Methodology

This section will elaborate the steps in conducting the research.

3.1 Research Stages and Design

This research was carried out using the Research and Development (R&D) method. This method is used to produce products and test their effectiveness [7]. The R&D method steps are as follows:

- research and data collection;
- planning;
- development of product draft;
- initial field trials;

- revise the trial results;
- field trials;
- improvement of field products;
- field implementation test;
- final product improvement; and
- dissemination and implementation [7].

The target of this research is the curriculum and learning process implemented at Polimedia.

3.2 Data Collection and Analysis Techniques

The data collection techniques used were focus group discussions, observation, document study, needs analysis, and interviews. Data analysis was performed by using R&D methods in the education sector. The process is to analyze needs and produce a proposed design.

4 Results

In this section, the research process or stages done based on the R&D method will be described. Systematic Research Results will be sorted starting from Research and Data Collection; Planning; Product Draft Development; and Initial Field Trials.

4.1 Research and Data Collection

At this stage, the condition of the educational environment needs to be studied. The things studied are the need to create an assessment rubric for student activities in the learning process. At Polimedia, carrying out OBE is a common thing. However, standardization of the output of student assignments or learning activities does not have a consistent reference. Educational implementation regulatory documents regarding student assignments are listed only in the Higher Education Standards regarding Learning Assessment Standards.

In the Polimedia Learning Assessment Standards it is stated that lecturers need to ensure the assessment components consist of: attendance with a weight of 10%, Mid-semester Exam with a weight of 15%, Final Semester Exam with a weight of 25%, and Daily Exams and/or Assignments and/or Practice with weight 50%.

Based on the Learning Assessment Standards, the weight of Assignments or Practices accommodates the largest student assessment score. This is appropriate because student practice and assignments usually have a heavier burden compared to objective or non-objective exams. However, the type of task or weight of each activity has not been identified in detail.

Based on observations of the conditions in the educational environment, it is urgent to prepare OBE-based course assessment rubrics so that all forms of student assignments and activities are documented and assessed accurately.

4.2 Planning

Planning for preparing an OBE-based assessment rubric at Polimedia was executed by taking a sample from one of the courses taught by the research team. The Basics of Journalism course in the Broadcasting Study Program, Communication Department, is held in second semester for first year students. This course is basic, but the student's assignments and

activities vary in order to achieve CPMK and the output of the course. Among the student activities are being able to identify the value and type of news, compiling a coverage Wishlist, practicing interviews, carrying out coverage, writing news stories, writing news scripts, and publishing news.



Fig. 1. Various students' activities in the Basics of Journalism course

These various activities need to be given accurate value weights in accordance with the specified achievements and targets. An accurate assessment will show the process or development of students' abilities in the learning process. Apart from that, as a form of evaluation whether the CPMK standards are appropriate and in accordance with the profile of graduates in the relevant industry.

Thus, the assessment rubric that will be prepared contains various student assignments and activities as well as aspects of their assessment. Apart from that, a Student Activity Sheet is also prepared as a document that students can access so that the process of carrying out their duties is in accordance with the procedures determined to achieve CPMK.

4.3 Product Development

Assessment Rubric

Developing a draft assessment product using a direct assessment rubric or direct method with the aim of examining the output of certain activities. This direct assessment method can be created based on the type of activity carried out by students, such as exams/tests/quizzes; Assignments to create portfolios, papers, or designs; Field practice; Class project; Student observations during practice; Final course assignments, and others.

Please note that the assessment rubric that will be developed is based on the Basics of Journalism course in the Broadcasting Study Program which is presented in semester 2. Student activities in the Basics of Journalism course include compiling a coverage Wishlist, carrying out interview and reporting practice, writing hard news and soft news articles and features. Apart from that, the type of rubric created is an analytical rubric to explain the aspects that are assessed using criteria levels and given an assessment scale or score. In this paper, one sample activity of compiling a coverage Wishlist will be elaborated.

Table 1. Analytical Assessment Rubric for Preparing Coverage Wishlists

Aspects being assessed	Scoring Scale				
	Very Poor (Score < 45)	Poor (46-55)	Fair (56-65)	Good (66-80)	Very Good (Score ≥ 81)

Completeness of Wishlist elements	There is no clear arrangement of wishlist elements.	A wishlist is created but the elements are incomplete.	The wishlist includes the right news angles. However, other elements are incomplete.	The wishlist includes the four elements in full and the appropriate news angle is written.	The wishlist contains four complete elements, accompanied by writing the right angle, and adding appropriate supporting news elements.
Accuracy in selecting sources	Sources or sides are not specified in the wishlist.	There are sources but they are not relevant to the news angle.	The source is relevant to the news angle but cannot be interviewed.	The source is relevant to the news angle and can be interviewed.	More than one or two sources who are relevant to the news angle and are possible to interview.
Preparation of a list of questions	Interview questions are not relevant to the news angle and cannot be answered by the source.	Interview questions are relevant to the news angle but cannot be answered by the source.	The interview questions were relevant and appropriate to the source, but seemed tendentious and led to the source's answers.	Interview questions are relevant and appropriate to the source. Prepared with clear and concise questions without leading on to source's answers.	Interview questions are relevant and appropriate to the source. Prepared with clear and concise questions without leading to the source's answers and the source's point of view represents the community.

Table 2. Student Activity Sheet for Preparing Coverage Wishlists

Student Activity Sheet		
Course	The Basics of Journalism / PUB0201	
Credit/ Semester	3/2	
Lecturer(s)	Freddy Yakob, M.I.Kom Putri Surya Cempaka, S.,Hum., M.Si.	
Output	Wishlist Document	
Date and Time	April 15-20 2024	
Materials	#06 Characteristics of Developing a Coverage Wishlist	
Course Learning Outcomes	1.	Students are able to recognize journalistic principles and ethics as journalists
	2.	Students create a news story
	3.	Students are able to compile a wishlist in preparation for coverage
Subjects	1.	Wishlist concept and creating a lead
Necessity	2.	Four elements of the wishlist: news angle, sides or sources, interview questions,

	3.	supporting element Selection of relevant sources
Job Description	1.	Determine the news angle in the form of the focus of the issues raised in writing the news
	2.	Determine sources or parties who are competent in the field about which the news will be written
	3.	Develop interview questions regarding the topic to be written about
	4.	Collect supporting elements, such as photos, graphics, videos, and others.
Working Method	1.	The class leader arranges the division into coverage groups of 3-5 people per group
	2.	Each group prepares at least 3 wishlists with 3 news angles from the same topic
	3.	Each group prepares a wishlist based on material #6 Characteristics of Developing a Coverage Wishlist
	4.	The wishlist is reported to the lecturer for approval or revision
	5.	After the wishlist is approved, the group departs for coverage according to the provisions
	6.	Report coverage results
Outcome Format	1.	Portfolio wishlist document for each news angle
	2.	Audio or video recording of the coverage results
	3.	Draft news articles
Criteria	1.	Completeness of wishlist elements (30%)
Indicators and	2.	Accuracy in selecting sources (35%)
Assessment Scale	3.	Preparation of a list of questions (35%)

4.4 Initial Field Trial

Cascading Matrix of Assessment Rubrics and Student Activity Sheets

The weight of each student assignment or activity needs to be adjusted to the workload carried out and the output produced. To determine task characteristics, a cascading matrix analysis was carried out on each student activity. The cascading matrix is a derivative matrix to determine the weight of each student assignment or activity. Student activities were analyzed in accordance with the assessment rubric and student activity sheet, namely Preparing Coverage Wishlists, Interview/Reportage Practices, and Writing News Articles. The aspects identified are the target aspect, level of target control, level of validity, achievement, type of target, and polarization of research type performance indicators.

Target Aspect. The Target aspect assesses the output or results of the assignments carried out by students in terms of quantity or quality. Quantity means output is assessed based on the number of products produced, for example the number of articles published, the number of questions asked for interviews. Quality means that output is assessed based on the quality of the output or product produced by students.

Target Control Level. Target Control Level assesses the control held by students in carrying out activities or each task. High means students carry out their activities with full control, usually individual activities. Medium means students carry out their activities with control that can be shared, usually group activities. Low means that the student does not have control or control or is carried out very little by the student.

Validity. The level of validity assesses the type or form of student activity outcomes. Exact means that the output is a product that is directly produced by students. Proxy means that the output is the result of assessments of various tasks carried out by students. Activity means the form of output in the form of activities or events organized by students.

Achievements. Achievement assesses how the task is carried out in accordance with its achievements, whether it can directly lead to the achievement or requires several steps to achieve the achievement. Direct means students can directly carry out activities and see the results. Indirect means that students cannot directly see the results of their achievements.

Target Type. Target Type assesses the form of assessment results from student assignments and activities. Sum means that all student activity assessments are added up and then multiplied by the weight percentage. Average means that student activity assessments are averaged into the weight of student activity assessments. Take last known assessment of student activities is taken from the last results of the output produced by students.

Polarization of Performance Indicators Types of Assessment. Polarization of Performance Indicators This type of assessment assesses the points to be considered in the assessment process. Maximize means there are points that exceed the target, which means it is better. Minimize means there are points where the lower the better, for example the lower the errors in writing an article, the better.

Table 3. Cascading Matrix of Assessment Rubrics and Student Activity Sheets

Matrix		Student Activities being Assessed		
		Compiling a coverage Wishlist	Interview and reporting practice	Writing news articles
Target Aspect	Quantity			
	Quality	√	√	√
Target Control Level	High	√		√
	Moderate		√	
	Low			
Validity	Exact	√		√
	Proxy			
Achievements	Activity		√	
	Direct	√	√	√
Target Type	Indirect			
	Sum	√	√	√
	Average			
Polarization of Performance Indicators Types of Assessment	Take Last Known			
	Maximize			
	Minimize	√	√	√

According to **Table 3** matrix, the Target Control Level also indicates the level of difficulty and student contribution in the activity. In the task of Compiling a Coverage Wishlist, the level of control is high with a series of attitudes, skills and knowledge that need to be implemented. The task of Compiling a Coverage Wishlist requires students to complete coverage elements, determine sources, and compile a list of questions for interviews with sources. Thus, this task needs to be given the highest value weight. Then, the News Writing task also has a high level of target control but the burden is not as high as Compiling a Coverage Wishlist. Therefore, the News Writing task has a lower level of control than Compiling a Coverage Wishlist. Then, the Interview/Reporting Practical task has the lowest level of control because the practice has been maximally prepared in the Compiling a Coverage Wishlist task. The assignment weight of 50%, it is divided into Compiling a Coverage Wishlist with a weight of 25%, Writing News with a weight of 15%, and Interviews with a weight of 10%.

5 Conclusion

The conclusion of this research is the result of drafting assessment rubrics and student activity sheets as a complement to learning documents in courses at Vocational Colleges. The development of assessment rubrics and student activity sheets can be used as administrative documents to prove the implementation of IKU or international accreditation of study programs. Apart from that, the draft development of assessment rubrics and student activity sheets provides benefits for lecturers to comply with administration and provide appropriate grades according to their workload. The benefits for students are clear instructions in assignments and transparency of the grades received for each assignment completed.

According to this conclusion, there are several solutions and suggestions offered. First, use sample courses or examples to be applied to each course. Second, applying the research to test the initial product to then become material for discussion and continue in the next program.

It is advisable to develop more in research for further analysis of the topic.

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